

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A liquid crystal device, comprising:

a pair of substrates respectively having electrodes on opposing surfaces, the pair of substrates sandwiching a liquid crystal layer,

a plurality of domains being formed within a display region when a voltage is applied to the electrodes, the plurality of domains being such that liquid crystal molecules are aligned in different directions from domain to domain,

at least one of the electrodes on the pair of substrates having an aperture section,

a protrusion section extending across the liquid crystal layer and which connects the electrodes, [[and]]

wherein the aperture section and the protrusion section are bent in such a manner that sides of the aperture section and sides of the protrusion section each extend in directions which respectively form about 45° with a long side and a short side of the display region, and wherein bent parts of the aperture section and bent parts of the protrusion section are discontinuous, and wherein the bent parts of the protrusion section are located in regions corresponding to solid portions of the electrodes, and

wherein the protrusion section comprises at least two protrusions in a given pixel,

wherein the bent part of each of said two protrusions in the pixel is discontinuous.

2. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: at least one of the electrodes has a protrusion as the protrusion section within the display region; and a height of the protrusion is identical to a thickness of the liquid crystal layer.

3. (Previously presented) The liquid crystal device as set forth in claim 2, wherein: the protrusion is provided to only one of the electrodes on the pair of substrates.

4. (Previously presented) The liquid crystal device as set forth in claim 2, wherein: the protrusion is provided to the electrode which opposes the electrode having the aperture section.

5. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: there are domain boundaries at the protrusion section and at the aperture section, the domain boundaries being boundaries between the domains in which the liquid crystal molecules are aligned in different directions from domain to domain.

6. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the protrusion section is provided outside a region where, in a two-dimensional view, the aperture section is provided.

7. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the protrusion section is made of dielectric material.

8. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the protrusion section is made of light-shielding material.

9. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the liquid crystal layer has negative dielectric anisotropy; and
the liquid crystal molecules are initially aligned vertically with respect to the electrodes.

10. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: a surface of the protrusion section is subjected to an alignment process which is different from an alignment process of regions other than the surface of the protrusion section.

11. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: a surface of the protrusion section is subjected to a horizontal alignment process so that the liquid crystal molecules are initially aligned in parallel with the surface of the protrusion section.

12. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: an alignment film is provided to the display region of the pair of substrates, whereas no alignment film is provided to a surface of the protrusion section.

13. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the protrusion section is tilted with respect to a thickness direction of the pair of substrates.

14. (Canceled)

15. (Previously presented) The liquid crystal device as set forth in claim 1, wherein: the protrusion section is provided in parallel with the aperture section.

16. (Previously presented) The liquid crystal device of claim 1, wherein the protrusion section is substantially V-shaped.

17. (Previously presented) The liquid crystal device of claim 1, wherein the aperture section is substantially V-shaped in the electrode in which the aperture section is formed.

18. (Previously presented) The liquid crystal device of claim 1, wherein the protrusion section and the aperture section are substantially V-shaped.

19. (Previously presented) The liquid crystal device of claim 1, wherein the aperture section includes one or more apertures defined in a pixel electrode.

20. (Previously presented) The liquid crystal device of claim 1, wherein the protrusion section includes one or more protrusions which extends from an electrode of one of the substrates to an electrode of the other of the substrates.

21. (Previously presented) The liquid crystal device of claim 1, wherein the liquid crystal layer has a negative dielectric anisotropy.

22. (Previously presented) The liquid crystal device as set forth in claim 1, wherein the protrusion section is substantially parallel to the aperture section.

23. (Previously presented) The liquid crystal device as set forth in claim 1, wherein the protrusion section extends across the liquid crystal layer, and is made of a different material than is the liquid crystal.

24. (Currently amended) A liquid crystal display device comprising:
a pair of substrates respectively having electrodes on opposing surfaces, the pair of substrates sandwiching at least a liquid crystal layer therebetween,
a plurality of domains formed within a display region when a voltage is applied to the electrodes, the plurality of domains being such that liquid crystal molecules are aligned in different directions from domain to domain,
at least one of the electrodes having an aperture section,
a protrusion section that extends across the liquid crystal layer and which connects the electrodes, [[and]]
wherein the protrusion section is bent in such a manner that sides of the protrusion section extend in directions which respectively form about 45° with a long side and a short side of the display region, and wherein bent parts of the protrusion section are discontinuous, and wherein the bent parts of the protrusion section are located in regions corresponding to solid portions of the electrodes, and
wherein the protrusion section comprises at least two protrusions in a given pixel,
wherein the bent part of each of said two protrusions in the pixel is discontinuous.

25. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein at least one of the electrodes has a protrusion as the protrusion section within the display region; and a height of the protrusion is identical to a thickness of the liquid crystal layer.

26. (Previously presented) The liquid crystal display device as set forth in claim 25, wherein the protrusion is provided for only one of the electrodes on the pair of substrates.

27 (Previously presented) The liquid crystal display device as set forth in claim 25, wherein the protrusion is provided to the electrode which opposes the electrode having the aperture section.

28. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein there are domain boundaries at the protrusion section and at the aperture section, the domain boundaries being boundaries between the domains in which the liquid crystal molecules are aligned in different directions from domain to domain.

29. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the protrusion section is provided outside a region where, in a two-dimensional view, the aperture section is provided.

30 (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the protrusion section is made of dielectric material.

31. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the protrusion section is made of light-shielding material.

32. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the liquid crystal layer has negative dielectric anisotropy; and the liquid crystal molecules are initially aligned substantially vertically with respect to the electrodes.

33. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein a surface of the protrusion section is subjected to an alignment process which is different from an alignment process of regions other than the surface of the protrusion section.

34. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein a surface of the protrusion section is subjected to a horizontal alignment process so that the liquid crystal molecules are initially aligned in parallel with the surface of the protrusion section.

35. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein an alignment film is provided in at least the display region of the pair of substrates, whereas no alignment film is provided on a surface of the protrusion section.

36. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the protrusion section is tilted with respect to a thickness direction of the pair of substrates.

37. (Previously presented) The liquid crystal display device as set forth in claim 24, wherein the protrusion section is substantially parallel to the aperture section.

38. (Previously presented) The liquid crystal display device of claim 24, wherein the protrusion section is substantially V-shaped.

39. (Previously presented) The liquid crystal display device of claim 24, wherein the aperture section is substantially V-shaped.

40. (Previously presented) The liquid crystal display device of claim 24, wherein the aperture section includes one or more apertures defined in a pixel electrode.